The Economic Benefits of Political Connections in Late Victorian Britain

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Abstract

The late-Victorian era was characteristed by especially close links between politicians and firms in the UK. Roughly half of all members of Parliament served as company directors, many as directors of multiple firms. We analyze 467 British companies over the period 1895 to 1904 to investigate the interaction of firms and politicians. We find that new-technology firms with politicians serving on their boards were more likely to issue equity finance and had higher Tobin's Q. Our evidence suggests that causality runs from director-politicians to a firm's performance, rather than in the opposite direction.

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I lntroduction

What is the benefit of having a politician on a company's board of directors? Politicians may be placed on company boards to signal to investors that the firm is profitable, politicians may be able to help match the firm with financiers, or politicians may be able to use their elected position to influence public policy in favour of their firms. We analyze an original data set of 467 British firms between 1895 and 1904 to study the interaction between firm performance and the presence of a member of Parliament or a member of the House of Lords on the company's board of directors.

Our analysis contributes to the literature on political connections and firm performance in two ways. While previous studies have generally explored the importance of political connections for firms, no work has yet analyzed if political connections have different effects on young firms in need of finance, relative to old established firms. We examine the political-firm nexus during the period of the second industrial revolution (1870-1914), to check whether politicians helped (or hindered) the emerging class of new-technology firms. Politicians could have helped the new-tech firms in different ways. New technologies were not easy for investors to fully understand, which exacerbated the problem of asymmetric information associated with any credit relationship. In some cases, the scientific advances were improved production methods. This was especially true for cotton textiles (the ring spindle and the automatic loom), iron and steel (the use of phosphoric ores), and chemicals (bleaching powder, fertilizers, and explosives). In other cases, such as electricity, bicycles, dyes, and the internal combustion engine, completely new products were introduced. In this context even good entrepreneurs could have faced problems in obtaining external finance, and politicians (with commensurately high fees) on a board may have signaled a profitable firm with a good production process, thereby raising its market value. In addition, politicians may have been able to obtain external finance (from banks or the stock market) for the firm they directed, and/or they may have been able to smooth the passage of favourable legislation (or hinder unfavourable legislation) in Parliament. Although all firms may have benefited from political connections, it is probable that new-tech (i.e., second industrial revolution) firms faced greater problems of asymmetric information, start-up finance, and an uncertain regulatory landscape. Therefore politicians were likely to be of more use to new-tech firms than to those in the traditional sectors such as railways and breweries.

A second benefit is an investigation of the interplay between politics and business in a country with a strong record of good government, the UK, but which has far more links between politics

and business than even the most intertwined contemporary economy. We find 26% of firms in our sample had either a member of the House of Commons or the House of Lords on their board of directors, substantially higher than Russia's figure of 12% (the most connected contemporary economy, see Faccio 2006, Table II). Faccio finds that, at 7.17%, the UK currently has one of the highest levels of connections between politicians and firms.[1] Countries with similar levels of connections are Indonesia (7.79%), Italy (10.30%), and Thailand (8.24%). Moreover, the UK is an outlier compared to countries with similar perceptions of corruption and legal heritage, e.g., Australia (0.70%), Canada (1.31%), New Zealand (0%), and the U.S. (0.08%).

We assess whether firms linked to politicians were more highly valued on the stock market. We investigate whether or not politically linked firms were able to issue more equity or debt finance on the London Stock Exchange, and we perform an event study analysis of the 1895, 1900, and 1906 general elections to see if firms' share prices were affected by the election of their directors. It is not even clear, *a priori*, that a political connection should be of benefit to a firm in Victorian Britain. Hannah (2007, p. 26) argues that: "the 'signal' that attracted the most negative comments was the appointment of aristocrats or elected members of parliament to boards."

Our most significant result is that politicians on the boards of new-technology firms were associated with increased access to external equity finance. In addition, these firms had higher stock market values than otherwise identical firms did without politicians (which may be due to the increased access to credit that such politicians provided). Further analysis suggests that causality most likely runs from directors as politicians to firms' performances, rather than in reverse.

We attempt to address issues of causality through four approaches. First, we perform an event study analysis and we check whether the election of members of company boards into the House of Commons translated into higher share prices. Second, we argue that the endogeneity of political connections would have had to operate in different ways for old- and new-technology firms in order to reproduce the main result of the paper – that only high-tech firms were positively affected by political connections. Third, we show econometrically that, while the number of political connections is not random, the observed selection does not appear to be contributing to the results. In particular, adding more controls in the regressions increases rather than decreases the estimated impact of political connections. Fourth, the available historical literature suggests that British politicians did not have particularly good business abilities, therefore they were most likely to be

[1] Faccio measures the connections of the top five company officials, rather than (our measure of) all directors.

just bringing the company social connections that could have eased the provision of external finance. We describe our treatment of causality issues in detail in the results section.

There has been much interest in the nexus of politics and business over the previous two decades. Roberts (1990) shows that the unexpected death of Senator Jackson (Washington), resulted in negative abnormal returns for firms located in Washington state, and firms which contributed to his campaign funds. Presumably these firms' stock prices dropped upon news of the senator's death due to the abrupt termination of the assistance that he could have continued to provide for these firms. Fisman (2001) shows that Indonesian firms with connections to the Suharto family suffered negative abnormal returns upon the dissemination of negative rumours about the health of President Suharto during the final years of his presidency. Faccio (2006) finds that the firms of business-people who are elected to Parliament achieve positive abnormal returns upon news of their election. Ghita, Cuyvers, and Deloof (2009) shows that there is a positive effect on a firm's stock price after it announces that a politically connected individual will join the firm's board. In a historical context, Ghita et al (2008) examine Belgium over the period 1858-1909 and find that firms with politicians on their boards were more likely to survive than non-connected firms. Ferguson and Voth (2008) show that German firms with connections to the Nazi party experienced excess returns of five to eight percent in the months just before Hitler's rise to power.

A Political Connections in Historical Perspective

The turn of the twentieth-century British Parliament was especially connected to the business world. Slightly more than 40% of all Members of Parliament (MPs) that were elected in 1895 held at least one directorship at the time of their election (see Table I). MPs elected at the next election, 1900, were even more connected to the business world, and more than half (50.8%) of them held one or more directorships. These figures are much higher than contemporary figures for the UK (13.0%) and the US (2.6%).[2] For each MP elected in 1895 and 1900 we cross-check the 1895 and 1901 Directory of Directors, to verify if that MP was also a director. The Directory of Directors lists the titles (e.g., MP, Sir, Right Honourable, Baronet) of directors, which makes the compilation of the politicians' business interests straightforward.

[2] We calculate contemporary figures as the total number of connections (from Faccio, 2006, Table II) divided by the number of MPs and Lords (UK) and Representatives and Senators (US). Some of Faccio's connections will be 'close relationships,' such as a friendship between a politician and a firm's director, which we do not include.

The increase in links between business and politics between 1895 and 1900 is fairly large. The average MP elected in 1900 held 1.29 directorships, compared to 1.08 in 1895. This increase came from more directorships held by English and Welsh MPs, and the increase was felt in London, provincial cities, and the countryside (see Table I). Most of this increase is due to incumbent politicians acquiring more directorships during their time in office, rather than an especially business-oriented cohort entering Parliament in 1900. From the 567 constituencies in England, Scotland, and Wales 373 MPs were elected in 1895 and held their seat in 1900. These incumbents held 1.03 directorships on average in 1895, and by the 1900 election they were seated on 1.41 boards on average. Of these 373 continuing MPs, 213 held the same number of directorships in 1900 as in 1895, while 112 had increased the number of boards on which they sat, and only 47 had reduced their board positions.

The 1895 and 1900 parliaments were both heavily Conservative, which may be suspected to upwardly bias the measured level of connections between politicians and firms. In the 1895 parliament the differences between the business connectivity of MPs, depending on their party affiliation were large. The average Liberal Unionist member held 1.69 directorships, compared to only 0.78 for the Liberals, with the Conservative MPs in between at 1.15 for each member. However, by 1900 most of this gap had disappeared. Fifty-five percent of all Conservative MPs were directors (holding on average 1.38 directorships), compared to 48% for the Liberals (average 1.31), and 46% for the Liberal Unionists (average 1.17).

MPs from London were slightly more likely to be directors and to hold more directorships, with this effect most pronounced in 1900. As London was the commercial, financial, and political capital this effect is not surprising. There are few differences between provincial urban MPs and MPs elected from rural constituencies. English politicians were more likely to serve as directors and to hold more directorships on average (53%, 1.37 in 1900) than Welsh MPs (35%, 0.97) or Scottish MPs (44%, 1.00), although again the differences are not especially large.

Politicians who were also involved in business was a relatively new phenomenon in the UK in the late nineteenth century, and, as our figures show, they took to it with gusto. Perkin (1989) documents that, after 1850, a prolonged fall in the general price level reduced agricultural prices and rents. Landed gentry started to look at industrial and financial businesses as a way to diversify their investments. As a result, it became more and more common to find aristocrats and MPs on the boards of industrial companies. For instance, by 1896 there were 167 noblemen, over a quarter of the peerage, holding directorships, most of them more than in one company (see Thompson,

1963).

The methods by which a company and a titled director matched were various. Often peers themselves sought to become involved in industrial endeavors. For example, in 1894 Lord Verulam was the director of two companies, in 1896 six companies, and by 1913 he was the director of thirteen companies. Serving as director in a firm could have been particularly profitable. In addition to diversifying their own investments, directors received a fee. The sum differed from company to company. In the case of Lord Verulam, his annual fees varied considerably, from £50 for the Colchester Brewery Co. to £500 for Accles Borneo Rubber, and in aggregate it yielded a substantial income in an era where nominal GDP per capita was a little under £50 per annum. At other times companies searched for a titled director, and a company promoter usually had a leading role in placing 'puppet' titled directors on company boards. Ernest Hooley was the most (in)famous company promoter of that era. His technique was to pay members of the aristocracy to sit on company boards, in order to give his companies the veneer of respectability: the going rate was £10,000 for a duke, £5,000 for a baron, and so on. It is premature to say that there was a well-defined market for titled directors, but in the last years of the nineteenth century, businessmen increasingly realized the importance of portraying business respectability by placing good sounding names on the board of directors. The late-nineteenth century was not an isolated period of indiscriminate bonding of firms and politicians in the UK. May (1939) quotes an ad that appeared in the October 4, 1932 issue of the *Daily Telegraph* that is suggestive: "A titled gentleman is wanted to communicate with progressive company with a view to installing him as director. Write A,. Box 10,161."

The experience of firms with political directors was often poor. Hannah (2007) claims that the: "fraudulent promoter, Whitaker Wright, used Lord Dufferin, the retired Governor General of Canada, and other gullible peers without business experience, as dummy directors of his London and Globe Corporation." The corporation later collapsed with unpaid claims of over £7 million. Harrison (1981) states that: "the glitter of the prospectus encrusted with the names of aristocrats, willing to serve as company directors, was a device to attract subscriptions from the public." Entrepreneurs wishing to float 'good' companies may have had an incentive to place (expensive) titled directors on their boards. This could overcome information asymmetry problems between entrepreneurs and investors and signal that the firm was expected to be successful.

Titled directors may also have represented good relationships with the important financial

centres of Britain. They may not have had any particular business ability; in many cases their main function was the acquisition of financial capital. In a later period the senior official receiver, H.E. Burgess, provided evidence along these lines (see May, 1939, p. 479): "I so frequently find [directors] are expert in nothing at all. They merely get a nice-sounding name to put on the prospectus. They can offer nothing but that name or the acquaintances they have who can be induced to put up capital."

Directors often directly assisted a firm's fund-raising. For example, in the proceeds of the 1899 annual general meeting of the County of London and Brush Provincial Electric Lighting Company, the vice-chairman (Mr. Braithwaite) was thanked for obtaining: "temporary advances from their bankers, which were obtained on very favourable rates, owing to the state of the money market and, to a great extent, to the able advice of Mr. Braithwaite."[3] In addition, Harrison (1981) claims that the New Cycle Company was able to raise £75,000 (three times the amount raised via an IPO) from: "four or five influential men."

An alternative possibility is that politicians may have instead provided regulatory connections that helped firms to achieve higher growth rates. This may have been particularly true for electricity supply firms. Hannah (1979) reports how the allocation of the electricity franchises in the various districts of London was the result of political struggles between different vested interests. In many instances private electrical enterprises needed the authorization of the local government to expand their activities and open new power stations. Having a member of the House of Commons or the House of Lords on the board of directors may have helped electrical firms win such political struggles and obtain better working terms. This benefit may have also been present in old-tech industries. For example, peers had long lasting interests in railways. The tracks needed to pass over the countryside, and the old aristocracy was often the landowner. As was the case for railways, coal and iron mining were activities intrinsically related to the ownership of land: a peer on the board may have permitted the company to pay lower royalties and have easier access to the mines.

By the beginning of the twentieth century politicians were already criticized for devoting too much time to their business interests, and not enough time to their constituents and the business of the nation. In March 1903 in the House of Commons a Mr. Mac Neill made the criticism that: "the hon. gentleman in charge of the Treasury Department ... should attend to the duties of his office, instead of the business of his companies ... On February 25 the hon. member attended a

[3] *The Times of London*, March 28, 1899.

meeting of the Westminster Electric Supply Association, and a resolution was proposed asking him to give his whole time to the company."[4]

Potential conflicts of interest were apparent during the period under study. The Marquis of Salisbury argued in the House of Lords in 1900 that: "There are directors and directors. There are directors of the most perfectly innocent kind; directors against whose business it would be impossible to raise any objection ... On the other hand, there are directors, undoubtedly who are connected with the Departments of the State, and, as has been pointed out more than once even of late, one or two of my colleagues have thought it right to retire from the position of director lest any suspicion should arise."[5]

II New Technologies

The years 1870 to 1914 were the years of the second industrial revolution, with many new technologies discovered. In some cases, the breakthroughs were new equipment or new production methods. This was especially true for cotton textile, iron and steel, and chemicals that increased the efficiency of existing production processes. In other cases, such as electricity, bicycles, chemical dyes, and the internal combustion engine, completely new products were developed. The technologies of the second industrial revolution were in many respects different from the breakthroughs of the late eighteenth century. Electricity and heavy chemicals were large-scale projects that needed stronger connections with formal science (see Mokyr, 1999).

These technical characteristics had important implications for the way such projects were financed. They required a high up-front fixed cost and a relatively long time before they started to work properly and deliver revenues. In other words, more than their predecessors, they needed venture capital. For example, electrical plants were major endeavors requiring money and time before their successful completion. One example is the building of an electric station in Deptford, London in 1887 by the London Electrical Supply Company and its prominent engineer, S.Z. Ferranti. The firm had proposed to light two millions lamps in London from a station located along the river Thames at Deptford, a major undertaking for that period. The firm generated its first power in 1890 and required a further five years until it could declare a first dividend (Shiman, 1992).

[4] *The Times of London*, March 5, 1903.

[5] *The Times of London*, December 15, 1900.

The same was true for the new chemical technologies. The ammonia process was complicated, and its implementation slow and difficult. Brunner Mond, the successful English company producing alkali with the processes pioneered by Ernst Solvay, took several years before mastering the product even with Solvay's help (see Lishcka, 1973 and Shiman, 1992).These technologies needed patient investors committed for a fairly long time to the endeavor.

In contrast, during the earlier stage of British industrialization, financing needs had been more modest. As described by Crouzet (1972, p. 164): "At the beginning of the [First] Industrial Revolution, the threshold of entry into 'factory' production was relatively low, especially in the textile industry, where even the largest production units were small."

The financing of new technologies at the turn of the twentieth century in Britain is a much debated topic. One view is that banks and investors failed to provide long term financing and to establish supportive relations with their industrial clients. Instead investors preferred to finance old technologies (such as railways) abroad. As a result, entrepreneurial endeavors in new technologies, such as electricity and chemicals, were discouraged (Kennedy, 1987). An opposing view argues that Britain did not fail to support new technologies. The open competitive nature of Britain's markets of the period could hardly sustain incompetence on any significant scale (McCloskey, 1970). This view is supported by new evidence that shows that investments abroad were optimal from investors' perspectives as they allowed better portfolio diversification (Goetzmann and Ukhov, 2006, and Chabot and Kurz, 2010).

III Variables and Data

A Data Sources

The data set consists of 467 British companies for the period 1895 to 1904, corresponding to roughly 2,800 firm-years. The sample covers a wide variety of firms in the manufacturing sector: breweries, chemicals, textiles, leather and rubber firms, paper and publishing, and iron and steel. We also consider five non-manufacturing industries: coal mining, railways, telegraphs, electricity generation, and electricity distribution.

The sample is not random: all the firms are public, joint-stock companies, that were traded by members of the London Stock Exchange (i.e. companies that were able to obtain at least some

financing through regular channels). Some of these firms were officially listed by the stock exchange and appeared in the *Stock Exchange Daily Official List* with bid and ask quotes. Others were traded unofficially in London or on provincial exchanges, and financial details of these firms were reported by the *Stock Exchange Official Intelligence*, an annual publication. Both types of companies had relationships with banks, and many issued both bonds and stock. If the firms in our sample faced credit constraints, then private firms would have probably faced even more severe constraints.

The sample is representative of the British industrial structure. The total market capitalization of the companies in our sample is about £555 million, which corresponds to 25% of the total capitalization as reported by Moore (2010) and 63% of the London Stock Exchange capitalization in 1900 (considering only ordinary and deferred shares) according to Dimson, Marsh, and Staunton (2002).

Accounting data and the names of the firms' directors were obtained from the original balance sheets of the firms, as well as the *Stock Exchange Official Intelligence*, and the *Directory of Directors*. The annual balance sheets of public companies were retrieved from the Guildhall Library, London. From the accounts it is possible to obtain data such as companies' debts, physical assets, and profits. The balance sheets also report the names of the directors along with their honorific titles and the address of the firm's headquarters It is therefore possible to determine if a director was a member of the House of Commons or the House of Lords. The balance sheets for electricity supply and telegraph companies are taken from *Garcke's Manual of Electrical Undertakings*.

Data on stock prices are obtained both from the *Investor Monthly Manual* (IMM), a sister publication of the *Economist*, and directly from the *Stock Exchange Daily Official List*. The IMM was published between 1869 and 1929 and recorded prices, dividends, and capitalization for railways and various industrial companies.[6] We obtain data on the value of new equity and bonds issued by firms from the IMM columns *British Capital Called up During (year)* and *British Capital Created During (year)*.

A large amount of the data employed in this analysis comes from the annual report and the balance sheet of companies. The quality of information present in published accounts, and public statements of company officials during this time in the UK is arguably limited when compared to present day standards. Arnold (1998) claims that: "during the first quarter of the twentieth

[6] Data from the IMM are available at the London Stock Exchange Project website: http://icf.som.yale.edu/imm/index.shtml

century, financial accounting practice was only lightly regulated, published accounting statements contained relatively limited amounts of information and informational asymmetry between senior managers and the suppliers of long-term corporate finance was material." However, other authors argue that British annual reports at the turn of the twentieth century were generally a reliable source. Hannah (2007, p. 658) reports that: "the great majority of companies published more and better information than was legally required and, in the absence of evidence to the contrary, this was treated by contemporary investors as broadly accurate." Similarly, Sylla and Smith (1995) claim that Britain had the best quality accounting information in the Western world. Audited accounts were required by banks from 1879 onwards and by all firms from 1900 onwards (see Hein, 1963). All the firms' accounting statements we examine have been certified by auditors. Auditors were elected at the AGM (a legal requirement from 1900 onwards). The Companies Act, 1900 required auditors to certify that the accounts reflected a "true and correct view of the state of the company's affairs". Arnold (1996) summarizes the literature on the quality of corporate accounts in Britain at the turn of the twentieth century. Citing several studies that compare companies' private documents with public accounts, he concludes that: "business historians may find the published financial statements of the latter half of the nineteenth century more reliable than they have supposed, although some caution on their part is still clearly advisable."

B Summary Statistics

Table II presents summary statistics for the main variables used in the analysis. The average firm had 6.4 directors on the board, of whom 6.5% were politicians. One quarter of all firms had at least one politician serving on its board. An average firm had been incorporated for almost fourteen and a half years, and around one-third of our firms were headquartered in London. Two-thirds of our firms were not officially listed on the London Stock Exchange. Slightly more than one-third of our firms were new-technology firms and almost 80% of the firms had paid a dividend during the previous twelve months. The average firm had a book value of assets equal to £2.6 million. We do not correct the book value for depreciation or goodwill.[7] Firms were quite profitable, with a

[7] Although audited accounts were published by almost every public company, there was no uniform accounting procedure. In particular, depreciation was an instrument to accumulate secret reserves in good times (by setting it at a high value) and to increase the stated profits and distribute dividends in bad times (by setting it at a low value). Fortunately, balance sheets report the amount of depreciation: the book value of the assets used in the analysis is the book value of the assets before depreciation.

return on equity (ROE) of almost 9% p.a. The average firm had been growing at 7% p.a. Growth is measured as the increase in the book value of a firm's assets plus any dividends disbursed. Although sales growth might be a better measure of a firm's growth, annual reports rarely report sales data.[8] The average Tobin's Q of a firm in our sample is slightly above one.

We find that 10% of our firms issued some form of capital in the following year to their observation, and 22% issued capital during the following three years. These capital issues were almost equally split between equity and debt.

We divide firms into two groups, new- and old-technology firms using a simple procedure. If a firm operated in the chemicals, electricity supply, electricity generation, cycle or motorcar sectors we classify it as new-tech. All other firms are classified as old-technology firms (e.g., railways, breweries, textiles).[9] We perform this breakdown because previous authors (e.g., Kennedy, 1987 and Cull, Davis, Lamoreaux, and Rosenthal, 2006) report that the British capital market had a skeptical approach towards new technologies. It is therefore interesting to study whether novel projects experienced different effects than did established production processes. We present summary statistics of new- versus old-tech firms in Table III. Unsurprisingly, new-tech firms were smaller, younger, grew faster, and were less likely to have paid a dividend in the previous year. New-tech firms also had slightly smaller boards of directors, and were much less politically connected than old-tech firms. Only 5% of new-tech firms had one or more politicians on the board, compared to 27% of old-tech firms. The values of leverage and Tobin's Q are almost identical between these two types of firms. New-tech firms were almost 50% more likely to issue capital during subsequent years, in both equity and debt forms.

We also divide firms into politically connected firms (those with at least one politician on the board of directors), versus unconnected firms (those with no politicians on the board) in Table IV. Politicians were more likely to be associated with firms with larger boards of directors (although of course some of this relation will be mechanical), more assets, and those which were officially listed. The average size of a firm with a politician on the board owned assets valued at £8.6 million,

[8] In a subset of the sample where sales data are available the correlation between sales growth and asset growth is about 0.6.

[9] We check company histories and balance sheets to verify the distinction between new and established technologies. For example, all the textile firms in our sample do not use the (new) technology of the automatic loom. In addition, we classify United Alkali (chemicals) as an old-tech firm because it was using the LeBlanc process rather than the newer Solvay process.

compared to firms without politicians (with assets of £0.5 million). Politically connected firms were also older (20.6 years vs. 12.6 years) and slightly less profitable (ROE of 7.9% p.a. vs. 9.2% p.a.). Politically connected firms were much more likely to issue capital, both within the next year (17.1% vs. 8.0%) and within the next three years (31.8% vs. 18.6%).

IV Results

A Access to Financial Markets

A politician can aid a company by providing, hitherto unavailable, access to credit. The politician may directly loan the firm money (if he is an individual of high net worth), perhaps influence banks to extend credit, or just lend his name to the firm's efforts to issue equity or debt on the London Stock Exchange. Reliable data do not exist to allow us to identify individual loans or bank loans to a firm. Therefore, we focus on the determinants of funding a firm via the stock exchange, both equity finance and debt finance. This finance consists of new issues of capital on the market, which was often offered pro-rata to existing share and bondholders.

We run a probit regression of whether or not a firm issued any equity security, or any debt security, in the three subsequent years on firm characteristics. Of our control variables we find that larger firms were more likely to issue debt, as were younger firms. Faster growing firms were more likely to issue both equity and debt, and firms that had paid dividends in the previous year were more likely to issue equity. In addition, unlisted firms were less likely to issue finance through the stock market. We include past industry returns in some specifications (the unweighted average of stock market returns in the previous year for all firms in the same industry) to capture any market timing effects. We find that an industry experiencing strong returns on the stock market induced firms in that industry to issue equity, and we find the same effect for debt issues although the effect is not statistically significant.

The effect of being a politically connected firm (*Fraction Politician*) appears to have reduced equity issuance. However, once we add interaction terms we see that unlisted firms with politicians and unlisted new-tech firms were less likely to issue capital. The triple interaction term indicates that politicians helped a particular class of firms to issue more funds: firms which were unlisted and in the new-tech sector. In principle, these are precisely the firms which are most likely to face the

most severe problems to access finance. As we mention in the historical section, these technologies had high fixed costs and long gestation periods, making their financing more complicated. The economic effects for these firms due to having a politician on their boards are reasonably large. A one standard deviation increase in *Unlisted * New-Tech * Fraction Politician* increases the probability that a firm will issue equity in the next three years by 2.9 percentage points (a 24.1% rise). Politicians were useful in helping unlisted, new-tech firms (which were likely to be small and fast growing) to undertake seasoned equity offerings, their effect on debt issuance is non-existent to small.[10]

As a robustness check for our classification of firms into new- and old-tech we try an alternative classification. The alternative uses the capital-labour ratio for that industry using Cain and Patterson's (1981) US data (as far as we know capital labour ratios by industry are not available for the UK in this time period). The idea is that industries with a high capital to labour ratio (in the US) are more likely to be new-technology firms, requiring long investment times with somewhat uncertain production processes. The results are basically unchanged, with the key finding that unlisted firms with a high capital-labour ratio are more likely to issue equity with a politician on the board (significant at the 5% level).

We also test if political connections influence the value of capital raised by firms: we find that this is indeed the case. A one standard deviation increase in the share of politicians on the board of new-tech companies increases the value of capital raised over the next two years by 14 %, which is statistically significant at the 5% level. The results are also economically and statistically significant when we check over the next year, and over the next three years.[11]

B Impact on Firm Value

We now turn to the impact of a political connection on a firm's value, measured by the impact on Tobin's Q in Table VI. The impact on firm value may not be independent of the financing benefits we show in Table V, i.e. a firm's value may have changed due to a political connection precisely because the connection increases a firm's access to credit, which in turn affects firm value. An alternative

[10] The triple interaction term remains statistically significant if past industry returns are included (not shown).

[11] We also verify if the share of politicians on the board has an effect on the value of capital issued, conditional on the firm accessing capital markets. In other words we restrict ourselves to firms that issued equity or debt during our sample period. The interaction term remains positive, but is not statistically significant.

explanation for the same result may be that politicians played a role in signaling a successful new-tech firm to investors, in other words alleviating a problem of asymmetric information between entrepreneurs and investors.

We regress Tobin's Q on various firm-level characteristics which have been lagged by one year. Unsurprisingly, the more profitable the firm was (ROE) in one year the higher the value of Tobin's Q the next year. A larger board of directors was associated with a higher Tobin's Q, although if we add firm fixed-effects (not reported) the sign changes. This probably indicates that the relation is a correlation, rather than a causal one, if the same firm were to add a director there would be a slight decrease in Tobin's Q. Such a negative correlation between board size and firm value is also documented by Yermack (1996). However, Yermack even finds a negative correlation without using firm fixed-effects, whereas we find a significant positive relation. One possibility is that firms in our sample often had smaller than optimal board sizes (our median board size is 6), whereas the U.S. firms in Yermack's study from 1984 to 1991 were often over staffed (with a median board size of 12). A firm that was unlisted on the London Stock Exchange tended to have a lower value than a listed firm. The variable politician is negative, and always statistically significant, which supports Hannah's (2007) argument. Politicians tended to be associated with firms with a lower Tobin's Q. However, the interaction of politicians with new-tech firms is informative. Politicians in new-tech firms were associated with higher values of Tobin's Q (perhaps due to easier access to finance), although our point estimate is only significant once we add industry dummies (Table VI, column 3). If we add firm fixed-effects the coefficient remains positive, but loses statistical significance since there is little variation in political connections at the firm level.

C Endogeneity Concerns

Political connections may have been correlated with the unobserved abilities of the entrepreneurs and possibly also with firm characteristics. For instance, politicians may have been more likely to work in efficient firms with high market valuations which were particularly active in issuing securities. If this were the case, our results would identify a spurious positive correlation between political connections and security issuance and Tobin's Q. In other words, a firm's performance would explain the number of politicians on the board, rather than vice versa. We tackle the endogeneity issue in four ways. While none of our methods can definitively resolve the issue, we believe that the bulk of the evidence suggests the existence of a causal relationship from a political

connection to firm performance, rather than the reverse.[12]

1 Election Results

To investigate if a politician could aid a firm, by dint of *his* (women were not eligible for election as MPs until 1918) legislative powers, we perform an event study analysis (see MacKinlay, 1997) around the general elections of 1895, 1900, and 1906. We study the effects, on a firm, of a director's electoral fortunes in the House of Commons general election. The general elections in these years were all landslides: Conservatives and Liberal Unionists by 234 seats (3.3% of votes) over the Liberals in 1895; Conservatives and Liberal Unionists by 219 seats (5.6%) in 1900; and the Liberals by 241 seats (5.5%) in 1906. Therefore the overall outcome should have already been mostly factored into share prices before the election. However, the results of a particular constituency were much less predictable, and the results in marginal seats may not have been well predicted pre-election, given that opinion polls were not used until 1937 in the UK (see King, 2001). Therefore, the result of a close election (containing a director) in a particular constituency may have had an effect on the share price of the director's firm. The direction of the impact is theoretically unclear. An astute director may have been able to help a firm by his presence in the Parliament (indicating a positive impact on share prices due to his unexpected election); however, becoming an MP required time being spent on political events and general governmental duties, and less time available to manage the firm. Therefore, the election of an astute director may have had a negative effect on the share price, if his absence from firm duties was deleterious to the firm's interests.

Election results were released slowly, day after day, in the four weeks that followed the election day. The slow release is not too critical, since most of the results were available relatively quickly: 36% within three days and 80% within seven days in the 1895 election.[13] As a result, we need to take a longer event window (fourteen days) than is usual in studies of this sort. The long event window has the advantage that it covers all the relevant disclosures of information, but at the same time adds more noise to our estimates. A further limitation is that we can only study the effects on the share prices of publicly listed firms. Consequently, we focus only on officially listed firms in

[12] Exploiting the panel nature of our data, we also performed panel fixed-effect regressions. While the sign of the interaction term is always positive, we lose statistical significance. We attribute this result to the fact the proportion of politicians on companies' boards is rather constant in our time period. As a result, most of the effect of the interaction term *New-Tech* * *Fraction Politician* is absorbed by firm fixed-effects.

[13] Country and Irish results were the last to come in.

London, firms whose securities were traded on the floor of the Exchange for which we have a good number of bid and ask quotes. We find 74 firms that had one or more directors that won seats in the general elections of 1895, 1900, and 1906. We also find 40 firms in which at least one director lost his seat. The small sample size does not allow us to make a meaningful distinction between old- and new-tech firms.

The event study analysis has been performed as follows. For each firm for which we have share prices, we calculate the abnormal/excess return on ordinary equity from the last Friday before the first day of the general election to the Friday fourteen days later:

$$r_{j,ann} = R_{j,ann} - (\widehat{a}_{j,ann} + \widehat{b}_{j,ann} R_{m,ann}) \tag{1}$$

where $R_{j,ann}$ is the actual return of security j and $R_{m,ann}$ is the actual return on the market. We estimate $a_{j,ann}$ and $b_{j,ann}$ with the market model using weekly data between the forty-sixth and the third week before the election announcement:[14]

$$R_{j,ann} = a_{j,ann} + b_{j,ann} R_{m,ann} + e_{j,ann}. \tag{2}$$

We use the weekly London market index constructed by Braggion and Moore (2011) to calculate the market return around each announcement date, $R_{m,ann}$. We then perform a cross-sectional regression of firms' abnormal returns on various electoral characteristics of the firms (see Table VII).

Firms that had at least one director elected to the House of Commons experienced excess returns about 1% higher than firms that had no officials elected in the four weeks following the election day (Table VII, columns 1 and 2), significant at the 10% level. Firms that experienced at least one loss experienced excess returns 0.6% less than other firms (Table VII, column 2), not statistically significant. Many firms had two or more directors contesting a general election. In column 3 we add various dummies to capture many of the combinations of electoral results for such firms. We find the strongest results for firms which had multiple directors re-elected. These firms outperformed the other firms by around 1.6% over the event window. The final result is a study of abnormal returns in uncontested constituencies. Not all constituencies had two or more candidates standing for election. For example, in 1900 the Conservatives had 163 MPs elected without a rival candidate. Since, by definition, the result of an uncontested election is certain, the period around election day

[14] The results are not sensitive to the choice of the estimation window.

should not generate abnormal returns. We find abnormal returns of -0.3%, which is not statistically significant.

While the sample of firms with elected officials is too small to make a meaningful distinction between new- and old-tech firms, the results broadly support the idea that a director being elected was associated with a positive jump in the share price of his firm. Gaining (or maintaining) a political connection was positively viewed by the stock market.

2 Old-tech vs. New-tech Firms

If political connections were endogenous to the performance of the firm, they would have had to operate in different ways for new-tech and old-tech firms to reproduce the key result in the paper, that political connections increase security issues and increase the market valuations, but only for new-tech firms. For instance, if politicians had sought to work in very profitable firms (with commensurately high Tobin's Q), they presumably should not have cared whether the firm operated in the new-tech sector as opposed to the old-tech sector.

Additionally, the past industry returns variable presented in Table V helps to alleviate problems of endogeneity related to omitted variables. It could be that politicians preferred to work in companies that performed particularly well (i.e., high returns for investors) in the years preceding security issuance. If this were the case our variable politicians may identify a market timing effect rather than a direct effect from politicians to the probability of a security issuance. Firms with high returns in the stock market may have exploited this opportunity to issue capital. When we include a variable for past industry returns (to control for possible market timing effects) our results are little changed, the political variables retain their signs and significance.

3 Selection on Observables

Although firms' political connections were not formed randomly, the observed selection does not appear to be contributing to our results. In particular, adding more controls in the regressions increases rather than decreases the estimated impact of political connections. It may have been the case that some unobservable factors (e.g., board acumen, quality of a firm's corporate governance) were correlated both with having political directors and a firm's propensity to issue capital. In that case a politician's presence may show up as positively related to capital issuance, not because the

politician provides any help, but rather because his presence indicates a particularly well run firm that finds it easy to issue capital.

If this omitted variables problem was present, and if these unobservable variables on firm quality resemble observable variables, then adding more observable variables should decrease the measured impact of politicians. For example, if high quality firms were more likely to be headquartered in London, or present in a particular industry (e.g., railroads with much more complete financial disclosure and widely dispersed share ownership), then once we add variables for London HQ and industry dummies, the effect of having a politician should disappear (see Altonji, Elder, and Taber, 2005). However, we find the reverse; adding more control variables increases the measured effect of politicians on capital issuance (see Table V, columns 2-5), and on Tobin's Q (see Table VI, column 3). Therefore, omitted variables do not appear to be driving our results.

4 Historical Evidence

Finally, several authors claim that politicians at this time represented, more than anything else, good relationships with the important financial centers of the late-nineteenth century and early-twentieth century Britain. The historical evidence suggests that politicians did not have any particular business ability; their main function was the acquisition of the financial capital necessary to maintain sound business activities (see Hannah, 2007 and Harrison, 1981).

While describing British capital markets in the early-twentieth century, May (1939) reported that: "sometimes a man with good name, knowing nothing about the business and even without residence in the country, is set up as chairman with the principal duty of reading the annual speech, which has been written out for him, to shareholders." We find little written evidence that politicians were hired by firms for their business acumen. Finally, we exclude Baronets from our sample. Baronets possessed hereditary honours, but were not peers. More importantly, many businessmen in our period were awarded a baronetcy by the crown after running a successful enterprise. We exclude Baronets to remove the obvious problem of endogeneity that including them would incur.

V Conclusion

The UK economy at the turn of the twentieth century had many links between politicians and firms. More than half of all members of the House of Commons held directorships, and these business links

did not differ markedly by political allegiance. Consequently, many British firms were connected, in the sense of being directed, by politicians. Politicians were more likely to be associated with larger, older firms; often the railways had one or more MPs as directors.

We find evidence that politicians were successful in alleviating credit constraints for unlisted, new-tech firms. These were precisely the firms that would, *a priori*, be expected to have had the most problems in accessing finance through formal channels. In addition, we find that politicians were associated with lower stock market valuations (Tobin's Q) for old-tech firms, but higher valuations for new-tech firms. Finally, we study the results of the general elections of 1895, 1900, and 1906. We find that firms which had directors elected experienced positive abnormal returns.

We find that politicians were able to provide value to some firms and not others. New-technology firms, which tended to be smaller, fast-growing, and less able to access credit through formal channels, benefited from their political connections. Old-technology firms which had political directors tended to have a lower share price, and less access to credit.

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Table 1 - Directorships of Members of Parliament (1895, 1900)

We present data on the directorships held by MPs at the time of their election in 1895, 1900. N is the number of politicians, 0 is the percentage of MPs who do not hold any directorships, 1 is the percentage holding only a single directorship, and so on. Mean is the average number of directorships held by the MPs, max is the maximum number held by MPs. Others includes all MPs not listed by Craig (1974) as belonging to the Conservative, Liberal, or Liberal Unionist parties.

				1895			
	N	0	1	2 - 4	5 or more	mean	max
Conservative	322	54.7	17.1	22.4	5.9	1.15	20
Liberal	167	61.1	19.8	16.2	3.0	0.78	7
Liberal Unionist	65	56.9	9.2	20.0	13.8	1.69	16
others	13	76.9	15.4	7.7	0.0	0.31	2
London	59	59.3	11.9	22.0	6.8	1.22	14
Provincial Urban	209	56.5	17.7	20.1	5.7	1.10	16
Counties	292	57.9	17.5	19.2	5.5	1.02	20
England	456	55.5	16.9	21.7	5.9	1.12	20
Scotland	70	61.4	18.6	14.3	5.7	1.04	16
Wales	34	76.5	14.7	5.9	2.9	0.47	6
Universities	7	42.9	14.3	28.6	14.3	1.86	7
All	567	57.3	16.9	19.9	5.8	1.08	20
				1900			
	N	0	1	2 - 4	5 or more	mean	max
Conservative	312	44.9	24.0	24.7	6.4	1.38	18
Liberal	172	52.9	17.4	22.1	7.6	1.31	15
Liberal Unionist	59	52.5	22.0	16.9	8.5	1.17	10
others	24	70.8	20.8	8.3	0.0	0.38	2
London	59	45.8	23.7	23.7	6.8	1.42	12
Provincial Urban	209	46.9	24.9	21.5	6.7	1.27	15
Counties	292	51.4	19.2	22.6	6.8	1.29	18
England	456	46.9	22.6	23.2	7.2	1.37	18
Scotland	70	55.7	20.0	20.0	4.3	1.00	5
Wales	34	64.7	14.7	14.7	5.9	0.97	10
Universities	7	57.1	14.3	28.6	0.0	0.86	3
All	567	49.2	21.7	22.4	6.7	1.29	18

Table II - Summary Statistics, 1895-1904

Board size is the number of directors. Fraction Politicians is the number of directors who were MPs or Members of the House of Lords divided by the number of directors for that firm. Any Politician equals 1 if there is at least one titled director on the board, and 0 otherwise. Firm age is the number of years since incorporation. London HQ is equal to 1 if the firm's headquarters are in London, and 0 otherwise. Unlisted is equal to 1 if the firm was not officially quoted on the London Stock Exchange and 0 if it was. New Technology is equal to 1 if the firm was in the electricity, chemicals, bicycle or car sectors. Dividend Payer is equal to 1 if the firm paid a dividend in the previous year, and 0 otherwise. Firm size is the book value of assets, in millions of pounds. Return on Equity is profits divided by paid up equity. Past growth is the book value of assets in period t plus dividends paid less the book value of assets in period t-1 divided by the book value of assets in period t-1. Cash over Assets is cash divided by the book value of assets. Tobin's Q is the market value of equity plus the book value of debt divided by the book value of equity plus the book value of debt. Issued any security in the next year is equal to 1 if the firm issued any form of debt or equity on the London Stock Exchange in the following year, and 0 otherwise, and similarly for 2 and 3 years. Issued ordinary equity is equal to 1 if the firm issued any ordinary equity, and 0 otherwise. Issued bonds is equal to 1 if the firm issued any debt security, and 0 otherwise. Each observation is a firm-year.

	Mean	Median	s.d.	Observations
Board Size	6.44	6	3.62	2845
Fraction Politician	0.07	0	0.13	2845
Any Politician	0.26	0	0.44	2845
Firm Age	14.70	10	13.83	2845
London HQ	0.38	0	0.48	2845
Unlisted	0.67	1	0.47	2845
New Technology	0.37	0	0.48	2845
Dividend Payer	0.79	1	0.41	2731
Firm Size (£, millions)	2.63	0.27	11.58	2845
Return on Equity	0.089	0.073	0.121	2845
Past Growth	0.067	0.054	0.112	2252
Cash over Assets	0.07	0.04	0.10	2845
Tobin's Q	1.12	1.04	0.41	980
Issued any security in the next year	0.10	0	0.31	2845
Issued any security in the next 2 years	0.17	0	0.37	2845
Issued any security in the next 3 years	0.22	0	0.41	2845
Issued ordinary equity in the next year	0.04	0	0.21	2845
Issued ordinary equity in the next 2 years	0.08	0	0.27	2845
Issued ordinary equity in the next 3 years	0.11	0	0.32	2845
Issued bonds in the next year	0.04	0	0.20	2845
Issued bonds in the next 2 years	0.08	0	0.27	2845
Issued bonds in the next 3 years	0.10	0	0.30	2845

Table III - Summary Statistics, 1895-1904

Firms are divided into old-tech and new-tech firms. Variables are as defined in Table II.

	New Tech Firms				Old Tech Firms			
	Mean	Median	s.d.	Observations	Mean	Median	s.d.	Observations
Board Size	5.94	6	2.39	1065	6.75	6	4.15	1780
Fraction Politician	0.05	0	0.11	1065	0.07	0	0.14	1780
Any Politician	0.05	0	0.11	1065	0.27	0	0.45	1780
Firm Age	9.16	7	8.38	1065	18.01	13	15.31	1780
London HQ	0.42	0	0.49	1065	0.35	0	0.48	1780
Unlisted	0.70	1	0.46	1065	0.65	1	0.48	1780
Dividend Payer	0.74	1	0.44	1032	0.82	1	0.38	1699
Firm Size (£, millions)	0.52	0.21	1.04	1065	3.90	0.32	14.47	1780
Return on Equity	0.087	0.071	0.103	1065	0.090	0.073	0.131	1780
Past Growth	0.082	0.064	0.130	847	0.058	0.050	0.099	1405
Cash over Assets	0.07	0.05	0.09	1065	0.07	0.03	0.10	1780
Tobin's Q	1.13	1.05	0.42	294	1.11	1.04	0.40	686
Issued any security in the next year	0.13	0	0.34	1065	0.09	0	0.28	1780
Issued any security in the next 2 years	0.21	0	0.41	1065	0.14	0	0.35	1780
Issued any security in the next 3 years	0.27	0	0.44	1065	0.19	0	0.39	1780
Issued ordinary equity in the next year	0.05	0	0.23	1065	0.04	0	0.19	1780
Issued ordinary equity in the next 2 years	0.10	0	0.30	1065	0.07	0	0.25	1780
Issued ordinary equity in the next 3 years	0.14	0	0.35	1065	0.10	0	0.30	1780
Issued bonds in the next year	0.06	0	0.23	1065	0.03	0	0.17	1780
Issued bonds in the next 2 years	0.11	0	0.31	1065	0.06	0	0.24	1780
Issued bonds in the next 3 years	0.14	0	0.34	1065	0.08	0	0.28	1780

Table IV - Summary Statistics, 1895-1904

Firms are divided into those with at least one politician (either an MP or a member of the House of Lords), and those without a politician, on their board of directors. Other variables are as defined in Table II.

	At least one politician on the board				No politicians on the board			
	Mean	Median	s.d.	Observations	Mean	Median	s.d.	Observations
Board Size	8.38	7	4.67	739	5.77	6	2.87	2106
Firm Age	20.58	14	17.82	739	12.64	9	11.43	2106
London HQ	0.40	0	0.49	739	0.37	0	0.48	2106
Unlisted	0.48	0	0.50	739	0.74	0	0.44	2106
New Technology	0.34	0	0.48	739	0.39	0	0.49	2106
Dividend Payer	0.83	1	0.38	681	0.78	1	0.42	2050
Firm Size (£, millions)	8.61	0.86	21.56	739	0.54	0.21	1.12	2106
Return on Equity	0.079	0.063	0.155	739	0.092	0.078	0.107	2106
Past Growth	0.069	0.053	0.126	567	0.067	0.054	0.107	1685
Cash over Assets	0.06	0.02	0.08	739	0.08	0.04	0.10	2106
Tobin's Q	1.07	1	0.346	385	1.15	1.06	0.44	595
Issued any security in the next year	0.17	0	0.376	739	0.08	0	0.272	2106
Issued any security in the next 2 years	0.26	0	0.440	739	0.13	0	0.341	2106
Issued any security in the next 3 years	0.32	0	0.466	739	0.19	0	0.389	2106
Issued ordinary equity in the next year	0.07	0	0.254	739	0.04	0	0.185	2106
Issued ordinary equity in the next 2 years	0.12	0	0.326	739	0.07	0	0.248	2106
Issued ordinary equity in the next 3 years	0.16	0	0.367	739	0.10	0	0.296	2106
Issued bonds in the next year	0.06	0	0.237	739	0.03	0	0.183	2106
Issued bonds in the next 2 years	0.10	0	0.300	739	0.07	0	0.252	2106
Issued bonds in the next 3 years	0.13	0	0.333	739	0.09	0	0.292	2106

Table V - Capital Issues, 1895-1904

We run probit regressions of whether or not firms issued equity or bonds in a public offering in the subsequent 3 years. Log Size is equal to the natural logarithm of the firm's assets in thousands of dollars. Past industry returns is equal to the equally weighted average return on all other equity securities in the same industry in the previous year. All other variables are as defined in Table II. All regressions use year fixed effects.

	Equity					Debt				
Industry dummies	No	No	Yes	Yes	Yes	No	No	Yes	Yes	Yes
Log (Firm Size)		0.011	0.005	0.005	0.005		0.018***	0.018**	0.019**	0.018*
		(0.007)	(0.007)	(0.007)	(0.007)		(0.007)	(0.007)	(0.007)	(0.007)
Log (1 + Firm Age)		-0.004	-0.017	-0.018	-0.016		-0.027***	-0.027**	-0.026**	-0.027*
		(0.011)	(0.012)	(0.011)	(0.011)		(0.010)	(0.011)	(0.011)	(0.011)
Return on Equity		-0.039	-0.006	-0.008	-0.012		-0.006	-0.007	-0.007	-0.015
		(0.059)	(0.028)	(0.027)	(0.028)		(0.041)	(0.038)	(0.038)	(0.045)
Past Growth		0.336***	0.250***	0.242***	0.251***		0.330***	0.283***	0.279***	0.288***
		(0.076)	(0.064)	(0.064)	(0.064)		(0.071)	(0.066)	(0.066)	(0.067)
Dividend Payer		0.048***	0.050***	0.049***	0.052***		-0.005	-0.015	-0.016	-0.013
		(0.017)	(0.016)	(0.016)	(0.015)		(0.018)	(0.018)	(0.018)	(0.018)
Cash over Assets		-0.194	-0.169	-0.149	-0.175		-0.132	-0.110	-0.101	-0.112
		(0.120)	(0.119)	(0.116)	(0.117)		(0.093)	(0.090)	(0.090)	(0.091)
Past Industry Returns				7.312***					1.392	
				(1.680)					(2.196)	
New Technology	0.031	0.022	-0.005	-0.006	0.055	0.020	0.005	0.031	0.034	0.071
	(0.026)	(0.023)	(0.029)	(0.029)	(0.043)	(0.022)	(0.019)	(0.030)	(0.030)	(0.042)
Fraction Politician	0.093	-0.062	-0.134*	-0.131*	-0.056	0.026	-0.105	-0.064	-0.061	0.008
	(0.085)	(0.077)	(0.078)	(0.077)	(0.090)	(0.091)	(0.087)	(0.082)	(0.081)	(0.092)
New Tech. * Frac. Politician	0.229	0.220*	0.268**	0.275**	0.031	0.211	0.163	0.097	0.100	0.000
	(0.155)	(0.133)	(0.127)	(0.126)	(0.155)	(0.149)	(0.130)	(0.122)	(0.122)	(0.144)
Unlisted		-0.078***	-0.071***	-0.070***	-0.021		-0.081***	-0.073***	-0.072***	-0.035
		(0.028)	(0.026)	(0.026)	(0.031)		(0.028)	(0.026)	(0.026)	(0.032)
Unlisted * Frac. Politician					-0.264					-0.239
					(0.166)					(0.165)
Unlisted * New Tech.					-0.082**					-0.053
					(0.028)					(0.028)
Unlisted * New Tech. * Frac. Politician					0.604*					0.238
					(0.258)					(0.259)
Wald Chi^2	11.259	98.838	124.664	179.023	128.765	6.493	77.564	122.843	122.747	128.389
N	2786	2786	2786	2769	2786	2786	2786	2786	2769	2786

Table VI - Tobin's Q

We regress Tobin's Q on the previous year's values of various variables. Both specifications use industry and year fixed effects. Variables are as defined in Table II.

Industry Dummies	No	No	Yes
New Tech.	-0.030	0.001	-0.009
	(0.075)	(0.057)	(0.094)
Log (Firm Size)		-0.016	-0.008
		(0.021)	(0.022)
Log (1 + Firm Age)		0.039	0.063*
		(0.031)	(0.034)
ROE		2.581***	2.667***
		(0.408)	(0.448)
Unlisted		-0.153***	-0.150***
		(0.056)	(0.058)
Log (1 + Board Size)		0.171**	0.174**
		(0.071)	(0.077)
Fraction Politician	-0.374***	-0.287**	-0.279**
	(0.138)	(0.119)	(0.117)
New Tech. * Fraction Politician	0.695	0.517	0.568*
	(0.475)	(0.335)	(0.330)
R-squared	0.024	0.325	0.373
Observations	941	941	941

Table VII - Event Study Analysis of Electoral Results

The dependent variable is the abnormal return of the firm over a 2-week election window. One or more wins is a dummy equal to 1 if at least one director was elected in a contested election and 0 otherwise. One or more losses, no wins equals 1 if all directors who contested an election lost; one win, no losses equals 1 if only one director contested and won; one loss, no wins equals 1 if only one director contested and lost; multiple wins equals 1 if two or more directors were elected in contested elections; multiple losses equals 1 if two or more directors contested elections and lost; and more wins than losses equals 1 if more directors won contested elections than lost.

	Contested Elections			Uncontested
One or more wins	0.010*	0.010*		
	(0.005)	(0.005)		
One or more losses, no wins		-0.006		
		(0.009)		
One win, no losses			-0.001	
			(0.005)	
One loss, no wins			-0.005	
			(0.012)	
Multiple wins			0.016*	
			(0.009)	
Multiple losses			0.008	
			(0.007)	
More wins than losses			0.001	
			(0.004)	
Constant	-0.002	-0.002	-0.002	-0.003
	(0.003)	(0.003)	(0.003)	(0.006)
R-squared	0.01	0.01	0.01	0
Observations	392	392	392	31